

# QUAKE BULLETIN

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## EARTHQUAKE EVENTS:

This database will give the information about the earthquakes that occurred worldwide and India wide from November 2014. The list of the earthquakes is as follows:

### Worldwide:

(Source: <http://earthquake.usgs.gov/earthquakes/>)

Date	Time (UTC)	Lat	Long	Depth (km)	Mw	Location
01/11/2014	18:57:22	16.696°S	177.729°W	434.0	7.1	Ndoi Island, Fiji
07/11/2014	03:33:54	06.044°S	148.210°E	43.2	6.6	Finschhafen, Papua New Guinea
15/11/2014	02:31:40	1.928°N	126.547°E	35.0	7.1	Kota Ternate, Indonesia
16/11/2014	22:33:20	37.682°S	179.685°E	22.0	6.7	Gisborne, New Zealand
21/11/2014	10:10:19	2.277°N	127.055°E	38.1	6.5	Tobelo, Indonesia
22/11/2014	13:08:18	36.640°N	131.911°E	10.0	6.2	Omachi, Japan
26/11/2014	14:33:43	1.975°N	126.546°E	41.1	6.8	Kota Ternate, Indonesia

### India wide:

(Source: Indian Meteorological Department, IMD,  
<http://www.imd.gov.in/section/seismo/dynamic/CMONTH.HTM>)

Date	Time (UTC)	Lat	Long	Depth (km)	Mw	Location
02/11/2014	5:41:04	26.8°N	94.0°E	30	4.1	Jorhat, Assam
14/11/2014	13:37:36	27.4°N	92.5°E	10	3.6	West Kameng, Arunachal Pradesh
16/11/2014	20:33:30	24.2°N	93.7°E	33	4	Churachandpur, Manipur
17/11/2014	4:34:09	20.7°N	94.3°E	64	5.5	Myanmar
17/11/2014	8:59:42	35.1°N	77.4°E	19	3.9	Jammu & Kashmir
18/11/2014	15:55:26	32.7°N	76.0°E	5	3.7	Chamba, Himachal Pradesh
19/11/2014	15:26:00	24.5°N	72.4°E	5	2.9	Sirohi, Rajasthan
20/11/2014	18:14:32	23.8°N	93.5°E	33	5.6	Myanmar-India (Mizoram) Border Region
20/11/2014	22:45:22	23.5°N	93.6°E	80	4.3	Myanmar-India (Mizoram) Border Region
21/11/2014	16:11:15	23.6°N	93.4°E	46	4.7	Myanmar-India (Mizoram) Border Region
21/11/2014	22:45:38	34.3°N	79.0°E	85	4.3	China-India (J&K) Border Region
22/11/2014	11:34:50	17.3°N	73.8°E	15	3.6	Koyna Region, Maharashtra

25/11/2014	15:49:08	27.8°N	84.7°E	7	3.8	Nepal
25/11/2014	21:32:26	27.1°N	89.0°E	10	4.5	Bhutan

## **GROUND MOTION RECORDS:**

In our centre around 543 ground motion records are available. Since 1973 the ground motions are available with N-S, E-W and U-D components. All the available ground motions are listed.

(Source: PESMOS-IITR)

<b>S No</b>	<b>Earthquake</b>	<b>Date</b>	<b>Station</b>	<b>Component</b>
1	Chamba	17 Jul 2009	Chamba	E-W
2	Chamba	17 Jul 2009	Chamba	N-S
3	Chamba	17 Jul 2009	Chamba	U-D
4	Chamba	17 Jul 2009	Dharmashala	E-W
5	Chamba	17 Jul 2009	Dharmashala	N-S
6	Chamba	17 Jul 2009	Dharmashala	U-D
7	Chamba	17 Jul 2009	Keylang	E-W
8	Chamba	17 Jul 2009	Keylang	N-S
9	Chamba	17 Jul 2009	Keylang	U-D
10	Golpara	26 Jul 2009	Golpara	E-W
11	Golpara	26 Jul 2009	Golpara	N-S
12	Golpara	26 Jul 2009	Golpara	U-D
13	Gangtok	03 Aug 2009	Gangtok	E-W
14	Gangtok	03 Aug 2009	Gangtok	N-S
15	Gangtok	03 Aug 2009	Gangtok	U-D
16	Andaman	10 Aug 2009	Port Blair	E-W
17	Andaman	10 Aug 2009	Port Blair	N-S
18	Andaman	10 Aug 2009	Port Blair	U-D

## **EERC LIBRARY:**

### **Publications:**

The following publications are very useful for research and are available in server

- ❖ Mohammadreza Yadollahi, Azlan Adnan, Rosli And Mohamad Zin (2012), "Seismic Vulnerability Functional Method for Rapid Visual Screening of Existing Buildings", Journal of Archives of Civil Engineering, Vol.LVIII, No.3, pp.363-377.
- ❖ Amin Karbassi and Marie-José Nolle (2013), "Performance-Based Seismic Vulnerability Evaluation of Masonry Buildings Using Applied Element Method in a Nonlinear Dynamic-Based Analytical Procedure", Earthquake, Vol.29, No.2, pp. 399-426.
- ❖ Alam, Shahria Alam, and Tesfamariam (2012), "Buildings' Seismic Vulnerability Assessment Methods: A Comparative Study", Natural Hazards, Vol.62, No.2, pp.405-424.

- ❖ Diptesh Das and Murty CVR (2004), "Brick Masonry Infills in Seismic Design of RC frame Buildings: Part 2 - Behavior", Indian Concrete Journal, Vol.80, No.8, pp.31-38.
- ❖ Zhang Cuiqiang, Zhou Ying, Zhou Deyuan and Lu Xilin (2011)., "Study on the effect of the infill walls on the seismic performance of a reinforced concrete frame", Journal of Earthquake Engineering and Engineering Vibrations, Vol. 10, No.4, pp. 507-517.

### **Reports:**

The following reports are very useful for research

- ❖ Berry M and Eberhard M. (2003)., "Performance Models for Flexural Damage in RC Columns", PEER Report 2003/18, Pacific Earthquake Engineering Research Centre, College of Engineering, Univ. of California, Berkeley.